An Automatic Irrigation System Can Be A Real Water Saver - Or Huge Water Waster

What are the features of a water efficient automatic irrigation controller? First and foremost it requires an attentive owner or landscape manager to regularly check for leaks and make *monthly* adjustments. Monthly? That's right, the water requirements of your landscape change regularly, based on the weather, soil moisture, and seasonal dormancies of the plants. Setting it and forgetting about it is a sure way waste water and drown your plants.

Some other key features:

- Easy to understand display
- Multiple program options because different watering zones need different amounts at different times (if your yard has any variation of landscaping, they would probably best be served by being divided into different irrigation zones)
- Multiple start times because frequent, short duration bursts of watering can reduce runoff, compared to having one, long irrigation period that exceeds the soils ability to absorb water
- Multiple scheduling options to meet the needs of your yard and any local ordinances
- Rain Delay / Rain Shut-off because irrigating your lawn while it's raining is just silly
- Water budget feature will allow you to make a percentage change in watering across all schedules, without having to reprogram each from scratch
- Test Functions

Some nice extras:

- Moisture sensors can detect how dry the soil is at the root zone, for more accurate watering
- Weather station links connect your system to evapotranspiration and climate data

My Irrigation System Is My Trusty Hose and Manual Sprinkler. How Can I Use Them Efficiently?

- Don't allow your sprinkler to water to the point where water is just running off the surface. If necessary, turn it off, wait 30 minutes, and then turn it on again. This will give the soil time to absorb the water building up at the surface.
- Set a kitchen timer or use a flow-control timer (sort of like an automatic light timer, it connects the hose to the outlet and can turn off flow to the sprinkler when the timer goes off).
- Look for a manual sprinkler with multiple spray patterns. These allow you to adjust for shapes like half circles, squares, and thin strips. The goal is to direct water just where you want it instead of paved areas where it will be wasted.
- When finished, turn your water off at the main faucet control. Hoses, sprinkler heads and spray nozzles are more likely to be damaged and leak.

Overall Tips for Irrigation Efficiency:

Never water in the middle of the day. Early morning is best for low evaporation and plant health. Watering in the evening is good for water savings, but increases the risk your plants will be damp for many hours, which can be detrimental to some.

- Learn how much water your grass / plants need during different types of the year (most turf grass needs a maximum 1" / week in the summer and less during the other seasons)
- Set your irrigation to water evenly (called "distribution uniformity"). A simple test for uniformity is to place several empty tuna cans around your yard while watering. Do they fill up evenly? Or are some overflowing while others are half full? If the latter, it's time to tweak your system, whether automatic or a surface sprinkler.
- Sub surface irrigation or a spray head that creates fat droplets near the surface are best. Spray heads that create a fine mist are likely losing a lot of water to evaporation.